

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image sensing and printing digital camera device comprising:
~~a housing defining a slot for receiving a printed instruction card;~~
~~an area image sensor positioned on the housing for sensing a viewed image to be printed on media and for generating pixel data representing the viewed image;~~
~~a linear image sensor for scanning the printed instruction card;~~
~~a printing mechanism that is arranged on the housing; and~~
~~a one-chip microcontroller that is positioned provided in the housing, the one-chip microcontroller integrating on the one chip a VLIW processor, an area image sensor interface connected to the VLIW processor for receiving pixel data from the image sensor, converting the pixel data into an internal format and writing the converted pixel data to the processing circuitry, the processing circuitry being configured to convert the pixel data to print image data, a linear image sensor interface, and a printhead interface connected to the VLIW processor for receiving the print image data from the VLIW processor and for providing signals representing the print image data to the printhead so that the printhead can carry out said printing operation to generate a printed representation of said viewed image, wherein~~
~~the one-chip microcontroller further includes a input buffer to which both the area image sensor interface and the linear image sensor interface are connected, the input buffer effecting communication between the VLIW processor and the area and linear image sensor interfaces.~~
2. (Currently Amended) A device as claimed in claim 1, ~~in which wherein~~ the area image sensor is one of a charge coupled device and an active pixel sensor.
3. (Currently Amended) A device as claimed in claim 1, ~~in which wherein~~ the printing mechanism includes an ink distribution assembly that is mounted on the printhead assembly to distribute ink to the printhead chips.
4. (Cancelled)
5. (Currently Amended) A device as claimed in claim 1, ~~in which wherein~~ the one-chip

microcontroller is configured to be programmable with any of a number of programmed by one or more image processing programs printed on the printed instruction card, and so that the one-chip microcontroller can carry out is operable to apply image processing operations on the pixel data in accordance with a selected program loaded on the one-chip microcontroller the one or more image processing programs.

6. (Cancelled)

7. (Currently Amended) A device as claimed in claim 6, in which claim 1, wherein the reader linear image sensor is an optical reader for reading a two-dimensional pattern printed on a planar element the printed instruction card, the two-dimensional pattern representing a program in an image processing language, the optical reader linear image sensor being configured to generate program data and the reader interface linear image sensor interface being configured to receive the program data and to write the program data in an internal format to the one-chip microcontroller to a memory of the one-chip microcontroller.

8. (Currently Amended) A device as claimed in claim 7, in which wherein the one-chip microcontroller includes a program memory device, and the VLIW processor being configured to write one-chip microcontroller is operable to write the program data in the internal format to the program memory device, the VLIW processor running and further operable to run the program from the program memory device to define a software algorithm by which registers in the printhead interface are addressed to apply a desired effect to the print image data.

9. (New) A device as claimed in claim 1, wherein the one-chip microcontroller further includes an output buffer, the output buffer effecting communication between the VLIW processor and the printhead interface.

10. (New) A device as claimed in claim 8, wherein the VLIW processor receives pixel data from the image sensor, converts the pixel data into an internal format, and writes the converted pixel data to the DRAM memory interface.

11. (New) A device as claimed in claim 9, wherein the VLIW processor converts the pixel data to print image data, and writes the print image data to the output buffer.